

COUNTY SHOP TO HARNESS WIND POWER

By Karl Puckett

The wind tower at the new Cascade County shop, scheduled to go up Friday, will provide nearly all of the facility's electricity.

Commissioner Peggy Beltrone, who developed the county's wind marketing program, also sees promotional power in the three-bladed electricity generator.

Located immediately off Interstate 15, the tower, in effect, is a 150-foot-tall billboard advertising the county's support for the wind industry and jobs and taxes it generates, she said.

"We're offsetting greenhouse gases," Beltrone said. "We're showing the public that we're walking the walk."

On Wednesday, with Beltrone and county Planning Director Brian Clifton looking on, workers began assembling the lattice tower in preparation for Friday's unveiling of the \$190,000 wind generator, the first government-owned turbine in the county.

The tower is part of the \$6.4 million new county shop complex, which is under construction and nearing completion seven miles west of Great Falls.

A group of Helena high school students has already booked a field trip to see the turbine and will be on hand to witness its debut Friday.

"This is a perfect situation from an educational standpoint," Beltrone said.

Clifton estimates the turbine will meet 85 percent of the 40,000-square-foot shop's electricity needs.

The investment is expected to be paid back in at least 20 years, but Clifton said the area's consistent wind could produce enough juice to retire the debt sooner.

"We believe it's going to come out a lot better than our conservative estimates," he said.

Cascade County is the first local government in the county to use wind to reduce the cost of electricity, but not the first in Montana, Beltrone said.

In 2003, Liberty County put up a 10-kilowatt tower at its shop facility in Chester.

Wind has reduced energy expenditures by 60 percent to 70 percent, Commission Chairman Russ Tempel said.

If the wind really blows, he said, the cost of powering the 60-by-120 facility, which typically averages less than \$200 a month, can plummet to \$8 or \$9.

"Anytime you can save money, you feel good about it," Tempel said.

Including its 50-foot blades, the 50-kilowatt wind tower at the Cascade County shop will reach 150 feet high and overlook a 40-acre site where the county is putting the finishing touches on the shop complex, which will house the road and bridge, solid waste and weed and mosquito departments.

The departments will begin moving in at the end of June.

At full steam, the wind turbine will produce about the same amount that it would take to power 12 houses for one year, said Charles Newcomb, managing director of operations for Boulder-based Entegry Wind Systems Inc., the turbine manufacturer.

Wind Systems and Bozeman-based Western Community Energy, the project manager, which focuses on locally owned wind projects, were on the scene Wednesday overseeing the work.

After the blades and turbine are added to the lattice tower, a 60-ton hydraulic crane will place it on three concrete pillars anchored 31 feet deep, Newcomb said.

More governments are using mid-sized towers to cut rising energy bills, Newcomb said.

"It's all about the cost of energy," he said.

The company has experienced 100 percent market growth yearly for the past three years, Newcomb said. Besides Cascade County in Montana, Entegry has supplied turbines to school districts in Texas and Kansas and a railroad in Ohio.

The 50-kilowatt towers, as opposed to 1.5- or 2-megawatt commercial turbines, make only enough energy for the customer to consume, not any extra to sell on the market.

"It's what we call load match," Newcomb said.